

letter containing a cheque for £50, which I returned to him, observing that there were duplicate specimens of certain birds in the collection that we had not in the British Museum, and that I should be pleased if he would let the Museum have them, which he most readily acceded to.

The collection was a very large and good one, but it has one fault common to most French collections; that is to say, the bird-stuffers constantly pull off the feathers, and replace them, with gum, so as to give the body a smooth appearance, and they are not always careful to put the feathers into the parts from which they were extracted. Until I saw the operation in the French laboratories I could not understand why some figures of birds in French works, and some descriptions of species taken from specimens in French museums, are said, as in Wagler's 'Systema Avium,' not to be quite true to nature.

*Genera of Gorgoniadæ.* By PROFESSOR VERRILL.

Professor Verrill, in a paper on the Corals and Polypes of the west coast of America, in the first volume of the 'Transactions of the Connecticut Academy,' p. 385, proposes to divide the family *Gorgoniadæ* into genera according to the spicules, thus:—

1. *Gorgonia*, with spindles in the cœnenchyma and an external layer of peculiar small club-shaped spicules, producing a smooth surface. Type *G. verrucosa*. Professor Verrill says this genus is very nearly allied to *Eunicia*.

2. *Pterogorgia*. The spicules in the cœnenchyma small, with double spindles, and also crescent- or bracket-shaped; they are nearly smooth on the convex side. Type *P. âcerosa*.

3. *Eugorgia*, with longer and shorter double spindles and numerous double wheels; surface decidedly granulous with naked spicules. Type *E. ampla*.

4. *Litigorgia*, having only the two forms of double spindles; surface somewhat granulous, but less so than in the last. Type *L. Floræ*.

He proposes to divide the genera into groups according to the branching of the coral, which M. Valenciennes used as a generic character.

*Lamarck's Collection of Shells.* By DR. J. E. GRAY.

Lamarck, in his work on Invertebrated Animals, described some of the species of shells from specimens in his own cabinet, and others from examples in the Museum of the Jardin des Plantes. This naturalist, who had a most wonderful faculty of perceiving natural groups and their relation to each other, and certainly was one of the most industrious of the votaries of natural science (for he not only published on zoology and botany, but on other branches of science), in his old age became blind, and so reduced in circumstances that when I saw him he was living in a very small room, with scarcely any furniture, on the stair leading to the library of the museum, chiefly supported by the labours of his daughters, who were employed to

place the plants in paper for the herbarium. I am glad to say that I never knew any man with even the slightest pretence to being a scientific student living in such a miserable state in this country; and to me it was a great distress to see two members of the Institute so illustrious as Lamarck and J. C. Savigny, who had done such good work while they had eyes to see, living, when they became blind and feeble by age, in such poverty and distress. To these names I might add a third conchologist, De Montfort; but his labours were small compared to the others', and his state of poverty more abject. The botanists of the Institute are not more fortunate or more cared for. I recollect with sorrow my visit to Louis Claude Richard, the author of the invaluable 'Analyse du Fruit,' and to M. du Petit-Thouars, a botanist who had done good work, and bears a name so celebrated in the naval annals of France. Our scientific men are rarely pensioners of the state, like the members of the Institute; but still they never come to such poverty, or die a lingering death from want of food and warmth, and at the same time are free to express any opinion, scientific, religious, or political, that they may conscientiously hold or wish to inculcate.

The Baron Benjamin Delessert purchased Lamarck's private collection of shells. When I went to Paris to study the types of the species which Lamarck had described, that I might name the shells in the British Museum with certainty, and also in hopes that I might have time to prepare for the press the work on the species of shells on which I had long been working, M. Delessert, who knew me years before as a botanical student, received me with his usual kindness, and offered me every facility to study the shells in the Lamarckian collection and make notes on them. I found in this collection species that had greatly puzzled me when, on a previous visit to Paris, I examined the shells as I could see them through the glass cases in the Jardin des Plantes; for there I observed that several of the specimens that were marked with the names of the new and unfigured species in Lamarck's 'Histoire' were well-known species, properly named in other parts of the collection; and I was more surprised when I found, on comparing them with Lamarck's short descriptions, that they could hardly be the specimens from which he had taken his characters. The difficulty was set at rest when I consulted M. Delessert's collection; for I then found that the shells in Delessert's collection that bore these names were either very distinct species or well-marked varieties, and there could be no doubt that they were the proper types of the Lamarckian species.

M. Delessert, in 1842, soon after obtaining the Lamarckian collection, published a large folio work, with very accurate plates, entitled "Recueil des Coquilles décrites par Lamarck dans son 'Histoire Naturelle des Animaux sans Vertèbres' et non encore figurées," which enabled conchologists to determine with accuracy many Lamarckian species. M. Kiener, who was the curator of the conchological portion of M. Delessert's collection, published, under the Baron's sanction and by his pecuniary assistance, the beautiful work entitled

“Illustrations Conchyliologiques, ou Descriptions et Figures de toutes les Coquilles connues.” After Kiener’s death, this work was continued by M. Chenu, who succeeded him, and it has reached its 84th Part; but I fear there is very little hope now of its being continued further.

M. Chenu (from the same collection, and I believe by the liberal assistance of its possessor) brought out his most useful ‘Manuel de Conchyliologie et de Paléontologie’—“Conchyliologie” in two large volumes, illustrated with nearly 5000 woodcut figures, which is certainly the cheapest work on science ever published.

M. Delessert has certainly done all in his power to illustrate the conchological labours of Lamarck and to forward the science.

*On the Constitution and Development of the Ovarian Egg of the Sacculinæ.* By J. GERBE.

In the ovule of a considerable number of species belonging to various classes of animals, there is, besides the vesicle known to physiologists as the *germinal vesicle* or *Purkinjean vesicle*, a second vesicle, generally of smaller size, which occupies a position more or less approximate to the former. Wittich, Siebold, and V. Carus have indicated it in the ovules of *Aranea domestica*; Balbiani has discovered it in those of the Myriopoda, of the Crustacea of the genus *Oniscus*, of frogs, of a considerable number of spiders, &c.; and, finally, Coste figured it as early as 1847 in the primitive ovule of the bird, immediately above the vesicle which forms the centre of the cicatricula.

What is the function of this second vesicle? Are we to regard it, with Balbiani, as the true formative centre of the germ? or is it not destined to fulfil some other function?

This question may be completely solved by the study of the ovule of those singular parasites the *Sacculinæ* (*Sacculina*, Cavolini, = *Pelto-gaster*, Rathke), which are found adhering to the tail in certain Crustacea, especially *Cancer mænas*.

In these parasites the reproductive organ, which alone forms five-sixths of the mass of the animal, contains ovules of all ages, the various evolutionary phases of which may be traced from their origin to maturity. Taken from about the central part of the organ, these ovules, which are only from 0.06 to 0.08 millim. in diameter, present a form so different from that generally exhibited by those of other animals, that it would be difficult to recognize their true character, if we did not see them pass from this to a more advanced stage, which leaves no doubt on the subject. They are then formed:—1, of two independent, transparent vesicles, of nearly equal volume, and touching each other almost by a single point of their circumference; 2, of a general envelope (vitelline membrane), which is very delicate and constricted about the point where the two vesicles are in apposition; 3, of a small quantity of colourless substance, excessively finely granulated, which separates the two vesicles from the enveloping membrane. The ovule, instead of being globular, is there-